

X. *Description of a remarkable new Sea-urchin of the Genus Cidaris from Mauritius.*
By F. JEFFREY BELL, M.A., Sec.R.M.S., Professor of Comparative Anatomy and
Zoology in King's College.

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[PLATE XXXVIII.]

A FEW months since the Trustees of the British Museum obtained from M. de Robillard, of Mauritius, another of those rarities in the collection of which he has so much distinguished himself¹. The specimen is unique, and its general facies would be so much altered by the removal of a fifth of the spinulation that I propose, on this occasion, to limit myself to a description of the external appearance of the most remarkable *Cidaris* it has ever been my good fortune to see. In the hope that further examples might be discovered I have delayed, longer perhaps than I should, the publication of a notice of this extraordinary specimen.

The primary spines are exceedingly long, some of them being more than 150 millim. in length, or about three times the diameter of the test. They are, however, most remarkable for being curved, slightly indeed, but yet distinctly curved in an upward direction. The base of the spine is flattened on its lower side; there are two sharp edges, and the upper side is formed of two halves set at a wide angle to each other, and ending in a distinct ridge. This ridge may be dentate and ornamented with a few minute tubercles. At a distance of about 20 millim. from its base the upper ridge disappears, and the spine becomes flat above as well as below. At about this point most of the spines become completely altered in colour (in the dry specimen), for while the basal part is creamy yellow, the rest of the large spine is of a reddish-brown colour. In many, near the tip, there are a few bands of brown and pale yellow. Where the brown colour begins a distinct striation also commences, and there are ten striæ on both the upper and the lower surfaces. The spine is widest at its base, and as it narrows very regularly the whole has the form of a greatly elongated triangle. Gradually and almost imperceptibly, the form of the spines in cross section alters, and instead of being depressed and flattened it becomes almost regularly circular.

The spines just described are arranged very regularly in pairs in each interambulacrum; only one or two are more than 150 millim. long; in each interambulacrum there are seven or eight primary spines, and the shortest are, as usual,

¹ I cannot let pass this opportunity of putting on record the regret with which all who are interested in marine zoology have heard of the recent death of this distinguished collector.

those nearest the mouth. It is usual for all to have the form and coloration already described; but those nearest the mouth are more spatulate in form than the rest.

The secondary spines are crowded in great quantities round the bases of the primaries and in the ambulacral areas; they are sharply pointed, and creamy or yellowish in colour. The apical area is very extensive and about half the diameter of the corona.

With regard to the affinities of this species it is not possible to say much. The amount of ostracum seen in transverse sections of the spines is slight, and there are no swellings, transverse crowns, or ridges, and no parasitic deposits. The long simple spines with striæ appear to be most like those members of the genus which have been distinguished as *Dorocidaris*.

A number of, as I think, very unnecessary genera have been founded for various examples of *Cidaris*¹. To *Cidaris* in a wide sense there is no doubt that the present specimen belongs, and I do not expect that the investigation of the denuded test will lead to the establishment of any new generic division for it. From the characteristic shape of the spines I propose to call it *Cidaris curvatispinis*.

EXPLANATION OF PLATE XXXVIII.

Cidaris curvatispinis, from a photograph, reduced to two-thirds of the natural size.

¹ Cf. Catal. Brit. Echinoderms Brit. Mus. (1892), p. 139.